

PTO/SB/08A (08-00)

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/808,353
				Filing Date	March 25, 2004
				First Named Inventor	Hongyong ZHANG et al.
				Group Art Unit	
				Examiner Name	
				Attorney Docket Number	0756-7272
Sheet	1	of	1		

[illegible][illegible]

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

Examiner Signature	<i>M. Wipzowski</i>	Date Considered	<i>12/05</i>
-----------------------	---------------------	--------------------	--------------

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box → [+]

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known 10/808353	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	Based on 09/222,185
				Filing Date	December 29, 1998
				First Named Inventor	Hongyong ZHANG, et al.
				Group Art Unit	2822
				Examiner Name	Mary Wilczewski
Sheet	1	of	4	Attorney Docket Number	0756-7272

U.S. PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
MW		5,278,093		Yonehara	01/11/94	
		5,147,826		Liu et al.	09/15/92	
		5,275,851		Fonash et al.	01/04/94	

FOREIGN PATENT DOCUMENTS								
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Office ³	Number ³	Kind Code ³ (if known)				
MW	JP		58-068923			04/25/83		Abst.
MW	JP		59-028327			02/15/84		Abst.
MW	JP		60-136304			07/19/85		Abst.
MW	JP		61-063017			04/01/86		Abst.
MW	JP		01-132116			05/24/89		Abst.
MW	JP		02-032527			02/02/90		Abst.
MW	JP		02-143415			06/01/90		Abst.
MW	JP		04-180219			06/26/92		Abst.
MW	JP		05-082442			04/02/93		Abst.

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
MW		English Translation of Japanese Patent Office Communication about Claim Rejection of Corresponding Japanese Patent Application		
MW		Caune et al., "Combined CW Laser and Furnace Annealing of Amorphous Si and Ge in Contact With Some Metals," Applied Surface Science, Vol. 36, 1989, pp. 597-604.		
MW		C. Hayzelden et al., " <u>In Situ</u> Transmission Electron Microscopy Studies of Silicide-Mediated Crystallization of Amorphous Silicon," (3 pages)		
MW		A. V. Dvurechenskii et al., "Transport Phenomena in Amorphous Silicon Doped by Ion Implantation of 3d Metals," <u>Akademikian Lavrentev Prospekt</u> 13, 630090 Novosibirsk 90, USSR, pp. 635-640.		
MW		T. Hempel et al., "Needle-Like Crystallization of Ni Doped Amorphous Silicon Thin Films," Solid State Communications, Vol. 85, No. 11, pp. 921-924, 1993.		

Examiner Signature	MW Wilczewski	Date Considered	12/05
-----------------------	---------------	--------------------	-------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → [+]

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known 10/808353	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	Based on 09/222,185
				Filing Date	December 29, 1998
				First Named Inventor	Hongyong ZHANG, et al.
				Group Art Unit	2822
				Examiner Name	Mary Wilczewski
Sheet	2	of	4	Attorney Docket Number	0756-7272

U.S. PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
MW		5,153,702		Aoyama et al.	10/06/92	
MW		5,463,254		Iyer et al.	10/31/95	
MW		5,600,169		Burgener et al.	02/04/97	
MW		5,882,960		Zhang et al.	03/16/99	
MW		5,895,933		Zhang et al.	04/20/99	

FOREIGN PATENT DOCUMENTS								
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Office ³	Number ³	Kind Code ² (if known)				
MW		JP	02-140915			05/30/90		Full
		JP	02-148831			06/07/90		Abst.
		JP	03-290924			12/20/91		Abst.
		JP	04-022120			01/27/92		Abst.
		JP	05-041519			02/19/93		Abst.
		JP	63-307776			12/15/88		Abst.
		JP	64-027222			01/30/89		Abst.
		EP	0 612 102			08/24/94		Engl.
		WO	92-01089			01/23/92		Engl.

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
MW		Kakkad et al., "Crystallized Si-Films By Low-Temperature Rapid Thermal Annealing of Amorphous Silicon," March 1, 1989, pp. 2069-2072, J. Appl. Phys. 65(5).			
MW		Kakkad et al., "Low Temperature Selective Crystallization of Amorphous Silicon," 1989, pp. 66-68, Journal of Non-Crystalline Solids, 115.			
MW		Liu et al., "Polycrystalline Silicon Thin Film Transistors on Corning 7059 Glass Substrates Using Short Time, Low-Temperature Processing," May 17, 1993, pp. 2554-2556, Appl. Phys. Lett. 62(20).			
MW		Liu et al., "Selective Area Crystallization of Amorphous Silicon Films by Low-Temperature Rapid Thermal Annealing," August 14, 1989, pp. 660-662, Appl. Phys. Lett 55(7).			

Examiner Signature	<i>MWileczewski</i>	Date Considered	<i>12/05</i>
--------------------	---------------------	-----------------	--------------

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Unique citation designation number. ³ See attached Kinds of U.S. Patent Documents. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → [+]

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known 10/808353	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	Based on 09/222,185
				Filing Date	December 29, 1998
				First Named Inventor	Hongyong ZHANG, et al.
				Group Art Unit	2822
				Examiner Name	Mary Wilczewski
Sheet	3	of	4	Attorney Docket Number	0756-7272

U.S. PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
<i>MW</i>		4,136,434		Thibault et al.	01/30/79	
<i>MW</i>		4,305,200		Fu et al.	12/15/81	
<i>MW</i>		4,604,150		Lin	08/05/86	
<i>MW</i>		4,942,441		Konishi et al.	07/17/90	
<i>MW</i>		5,100,815		Tsubone et al.	03/31/92	
<i>MW</i>		5,212,397		See et al.	05/18/93	
<i>MW</i>		5,313,075		Zhang et al.	05/17/94	
<i>MW</i>		5,372,958		Miyasaka et al.	12/13/94	
<i>MW</i>		5,485,019		Yamazaki et al.	01/16/96	

FOREIGN PATENT DOCUMENTS							
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office ³	Number ⁴	Kind Code ² (if known)			
<i>MW</i>		JP	63-030776			02/09/88	Abst.
<i>MW</i>		JP	05-067635			03/19/93	Full
<i>MW</i>		JP	01-132115			05/24/89	Abst.

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
<i>MW</i>		Hayzelden et al., "Silicide Formation and Silicide-Mediated Crystallization of Nickel-Implanted Amorphous Silicon Thin Films," J. Appl. Phys., Vol. 73, No. 12, 15 June 1993.		
<i>MW</i>		Schoenfeld et al., "Crystallization of Amorphous Silicon by NiSi ₂ Precipitates," Thin Solid Films 261, 1995, pp. 236-240.		
<i>MW</i>		Batstone et al., "In Situ TEM Studies of the Crystallization of Amorphous Silicon: The Role of Silicides," Microscopy of Semiconducting Materials 1993, pp. 165-172.		
<i>MW</i>		Bonnell et al., "Polycrystalline Silicon Thin-Film Transistors with Two-Step Annealing Process," IEEE Electron Device Letters, Vol. 14, No. 12, December 1993, pp. 551-553.		
<i>MW</i>		Wolf et al., "Silicon Processing For the VLSI ERA," Volume 1: Process Technology, pp. 216-218.		

Examiner Signature	<i>MW Wilczewski</i>	Date Considered	<i>12/05</i>
--------------------	----------------------	-----------------	--------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → [+]

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known 10/808353	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	Based on 09/222,185
				Filing Date	December 29, 1998
				First Named Inventor	Hongyong ZHANG, et al.
				Group Art Unit	2822
				Examiner Name	Mary Wilczewski
Sheet	4	of	4	Attorney Docket Number	0756-7272

U.S. PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
<i>MW</i>		4,693,759		Noguchi et al.	09/15/87	
<i>MW</i>		4,822,752		Sugahara et al.	04/18/89	
<i>MW</i>		5,612,251		Lee	03/18/97	
<i>MW</i>		5,582,640		Okada et al.	12/10/96	
<i>MW</i>		5,773,325		Teramoto	06/30/98	
<i>MW</i>		5,587,330		Yamazaki	12/24/96	
<i>MW</i>		5,620,910		Teramoto	04/15/97	
<i>MW</i>		4,597,160		Ipri	07/01/86	
<i>MW</i>		5,322,807		Chen et al.	06/21/94	
<i>MW</i>		4,918,028		Shirai	04/17/90	
<i>MW</i>		6,376,860		Mitanaga et al.	04/23/02	
<i>MW</i>		5,639,698		Yamazaki et al.	06/17/97	

FOREIGN PATENT DOCUMENTS							
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office ³	Number ⁴	Kind Code ² (if known)			
<i>MW</i>		EP	1 026 751			08/09/00	Eng.
<i>MW</i>		EP	1 026 752			08/09/00	Eng
<i>MW</i>		EP	0 631 325			12/28/94	Eng
<i>MW</i>		EP	0 631 325			05/07/03	Eng

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
<i>MW</i>		European Search Report dated October 2, 2002.	
<i>MW</i>		Communication Pursuant to Article 96(2) EPC, European Patent Office, June 30, 2003.	

Examiner Signature	<i>MW Wilczewski</i>	Date Considered	<i>12/05</i>
--------------------	----------------------	-----------------	--------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

